

Virginia Department of Forestry



Outlying Landing Field (OLF) Site Suitability

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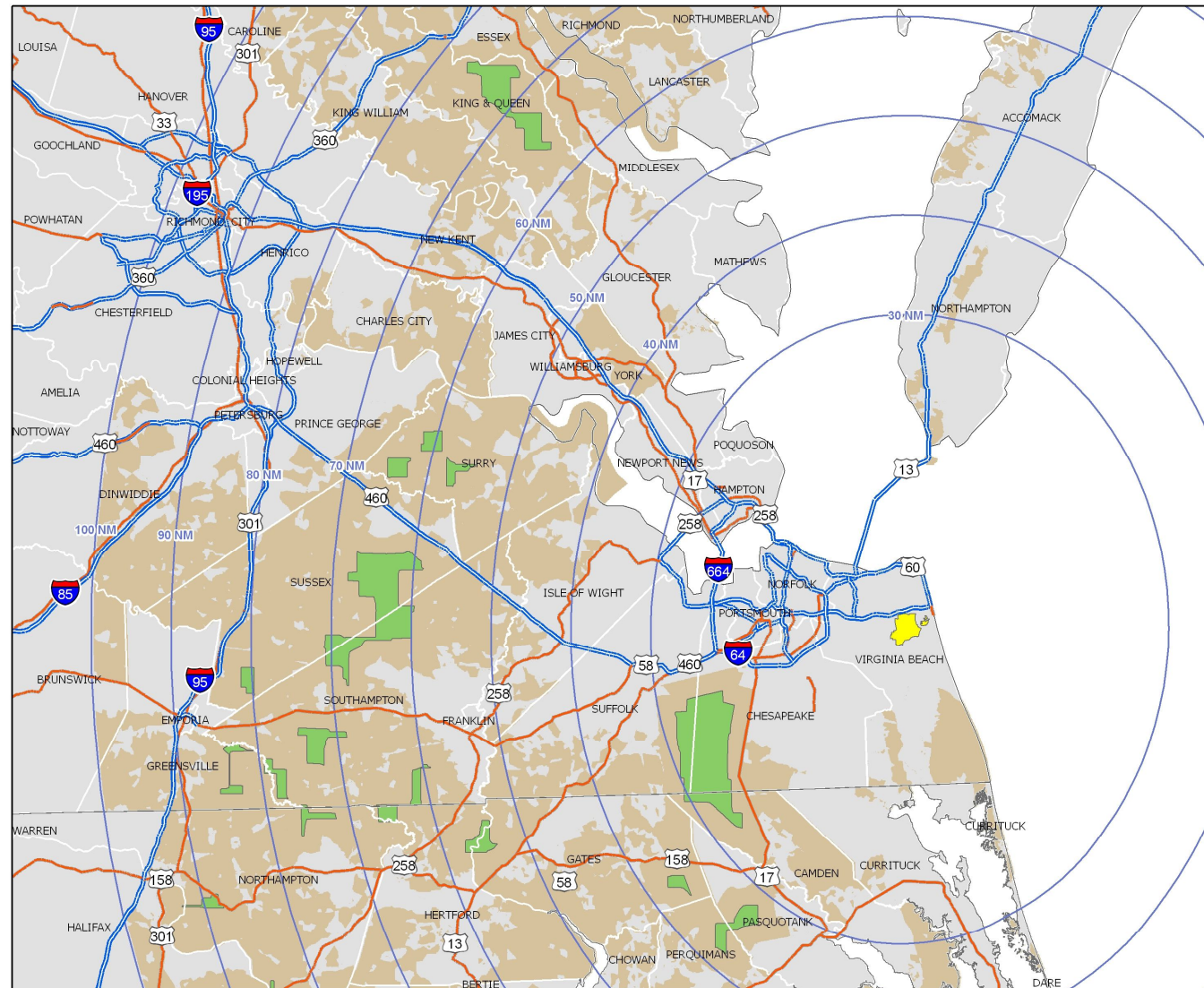
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Methodology

- Suitable areas were identified by overlaying the following criteria in a Geographic Information System (GIS) at 100 meter resolution:
 1. Population density \leq 50 people per sq mile (Census 2000)
 2. “Rural” housing density based on housing density projections developed by Dr. David Theobald with Colorado State University. The data provides projection of housing density to the year 2030. It is derived through Theobald’s Spatially Explicit Regional Growth Model (SERGoM v2) and uses data from 2000 Census Bureau data, Protected Areas Database v3, Geographic Data Technology’s Road Density county population projections, and NLCD 1992. The provided data is classified into 15 classes depending on housing density. The 15 classes are grouped into urban, suburban, exurban, rural and undeveloped categories. Areas suitable for OLF sites excluded urban, suburban, and exurban classes.
 3. Rural forest and rural agriculture. Source: Radeloff, V. C., R. B. Hammer, S. I Stewart, J. S. Fried, S. S. Holcomb, and J. F. McKeefry. 2005. The Wildland Urban Interface in the United States. Ecological Applications 15:799-805 as reclassified by VDOF.
- In order to identify continuous areas that satisfy the above criteria we shrunk all suitable areas by 30 cells (3 km). We filtered the results to those \geq 2,000 acres, resulting in 16 core sites with a 3km buffer that fall within 90 nautical miles of the centroid of Oceana Naval Air Station*.

* The analysis did not extend beyond 30km south of the Virginia/North Carolina border.

Site Identification					Development Constraints							
#	OLF Site ID	County	State	Acreage	Distance from site centroid to centroid of Oceana Naval Air Station (NM)	Places - schools, churches, hospitals, parks	# Easement Sites	# Conserved Land Sites	# Natural Heritage Sites	# Architectural Sites	# Archeological Sites	Land Parcels
1	Site 1A	King & Queen County	VA	20318.30	66.25	2 churches on site	1	4	1	17	16	Mean acreage: 42 Max acreage: 859 no IP data
2	Site 2A	Surry County	VA	2797.43	47.91	1 school	n/a	n/a	n/a	n/a	n/a	Mean acreage: 58.57 Max acreage: 911.51 no IP data
3	Site 2B	Surry County	VA	3259.31	51.11	1 school; 1 church	n/a	n/a	n/a	n/a	n/a	Mean acreage: 30.44 Max acreage: 734 no IP data
4	Site 2C	Surry County	VA	3396.84	53.50	n/a	n/a	n/a	n/a	1	8	Mean acreage: 110.37 Max acreage: 1288.45 no IP data
5	Site 3A	Sussex/Southampton	VA	39554.90	53.20	5 schools; 5 churches	1	1	23	6	7	Mean acreage: 142.65 Max acreage: 4896.22 IP land: 3860.56 acres
6	Site 3B	Sussex	VA	2683.24	66.25	1 church	n/a	n/a	4	1	n/a	Mean acreage: 36.6 Max acreage: 377.89 no IP data
7	Site 4A	Southampton	VA	2949.84	51.61	n/a	n/a	n/a	2	1	1	Mean acreage: 64.32 Max acreage: 331.98 no IP data
8	Site 4B	Southampton	VA	7199.91	60.12	n/a	1	n/a	1	2	1	Mean acreage: 138.85 Max acreage: 952.42 no IP data
9	Site 4C	Southampton	VA	3560.12	64.83	1 school; 1 church	n/a	n/a	5	1	6	Mean acreage: 278.87 Max acreage: 1549.03 IP land: 647.01 acres
10	Site 5A	Greensville	VA	2826.55	69.01	1 church	1	n/a	7	n/a	4	Mean acreage: 103.14 Max acreage: 3015.05 IP land: 471 acres
11	Site 6A	Pasquotank/Perquimans	NC	6880.67	34.25							
12	Site 7A	Gates	NC	2063.80	34.19							
13	Site 7B	Gates/Hertford	NC	4590.06	47.63							
14	Site 8A	Hertford	NC	2705.14	55.21							
15	Site 9A	Northampton	NC	2672.87	62.41							
16	Site 9B	Northampton	NC	2030.70	75.16							

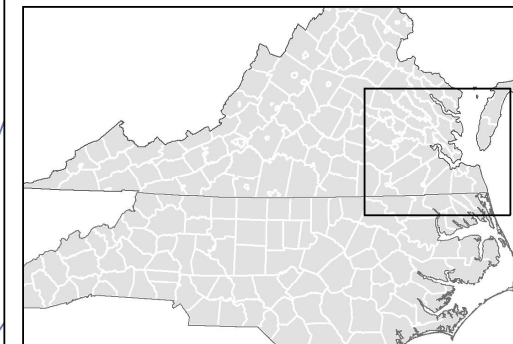


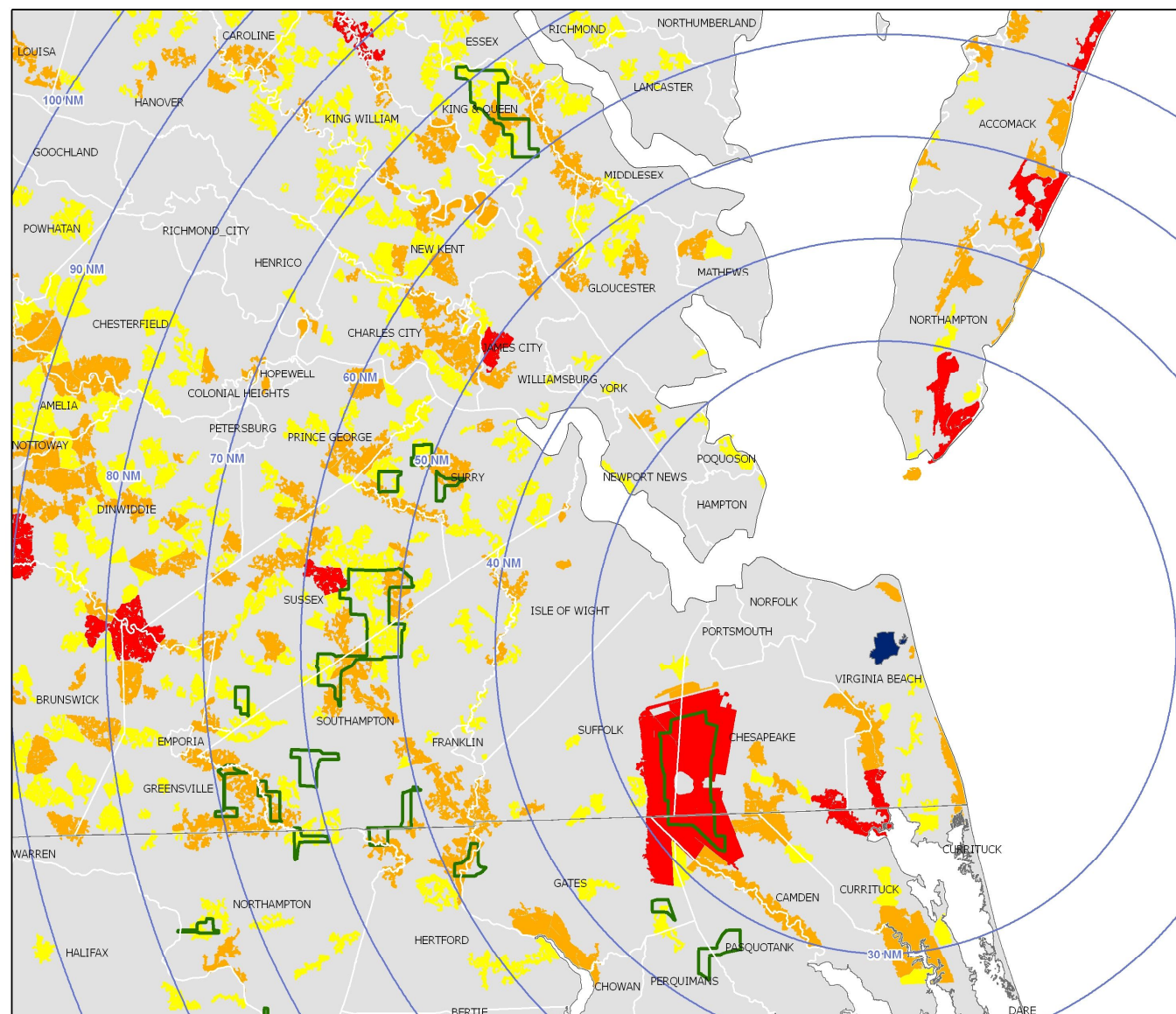
OLF Site Selection



- Suitable areas according to the following criterion:
 1. Pop Density ≤ 50 per/sq mi
 2. Rural Housing Density projected to 2030
 3. Rural Ag, Rural Forest, or Water landcover class *
- Core areas of 2,000 acres or more surrounded by a 3 km buffer that satisfies the above criteria
- Oceana Naval Air Station

* Data available in Virginia only.





OLF Site Selection

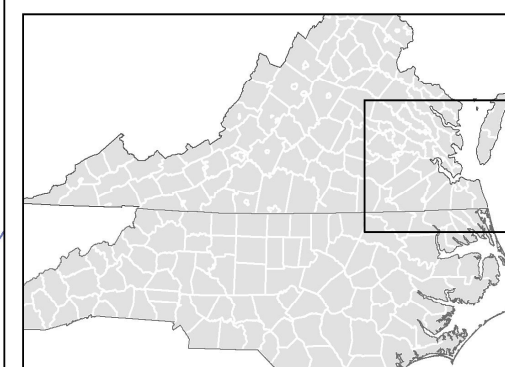


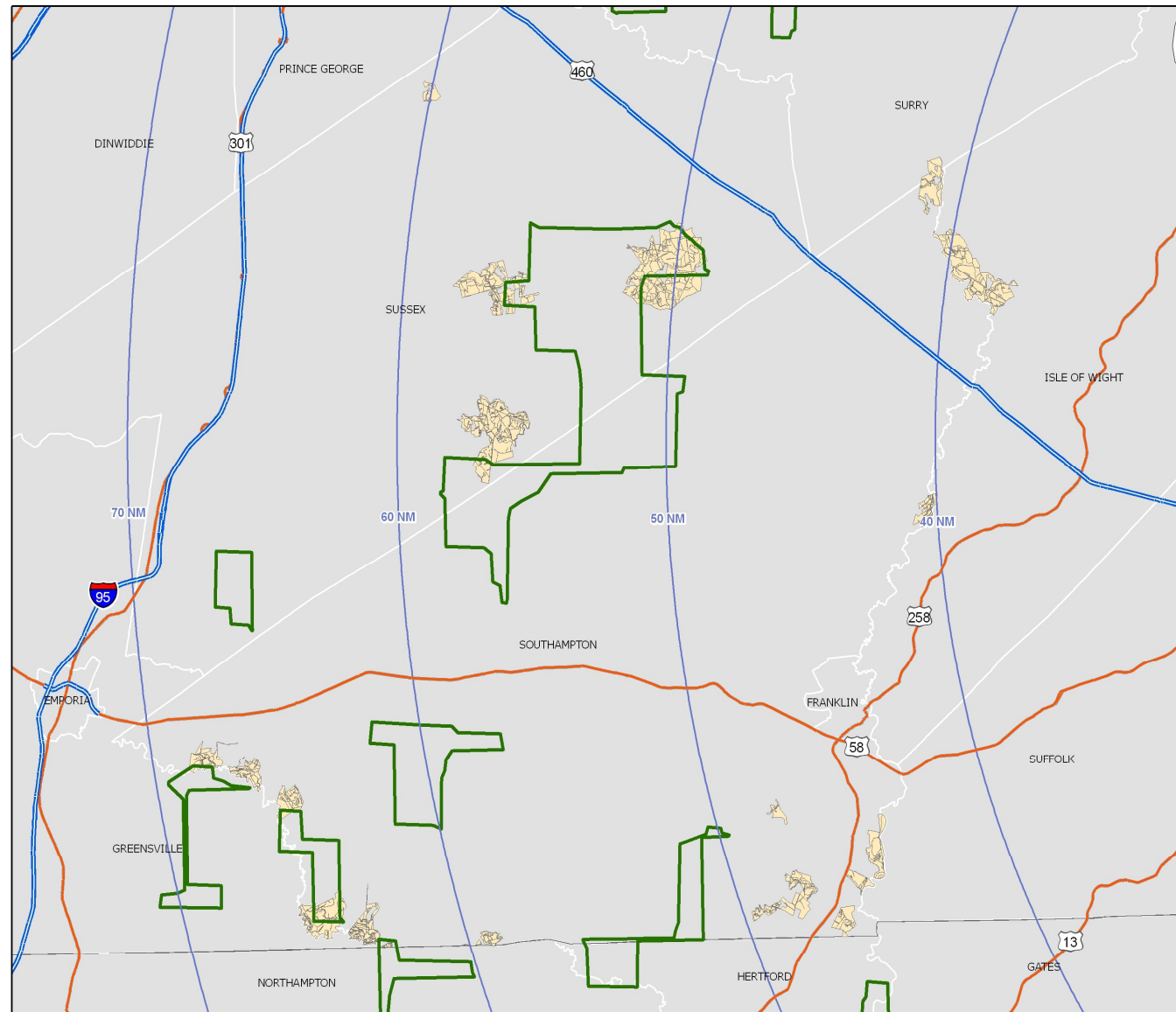
Ecological Integrity *

- C1: Outstanding
- C2: Very High
- C3: High

- OLF sites
- Oceana Naval Air Station

* Virginia Department of Conservation and Recreation

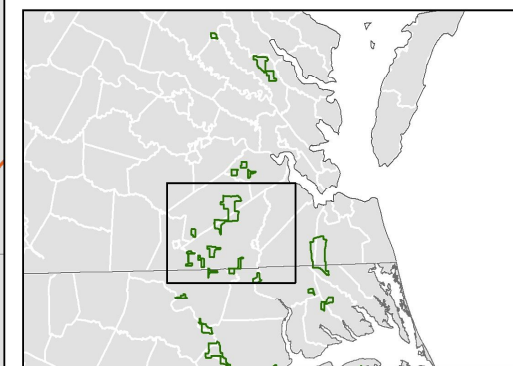


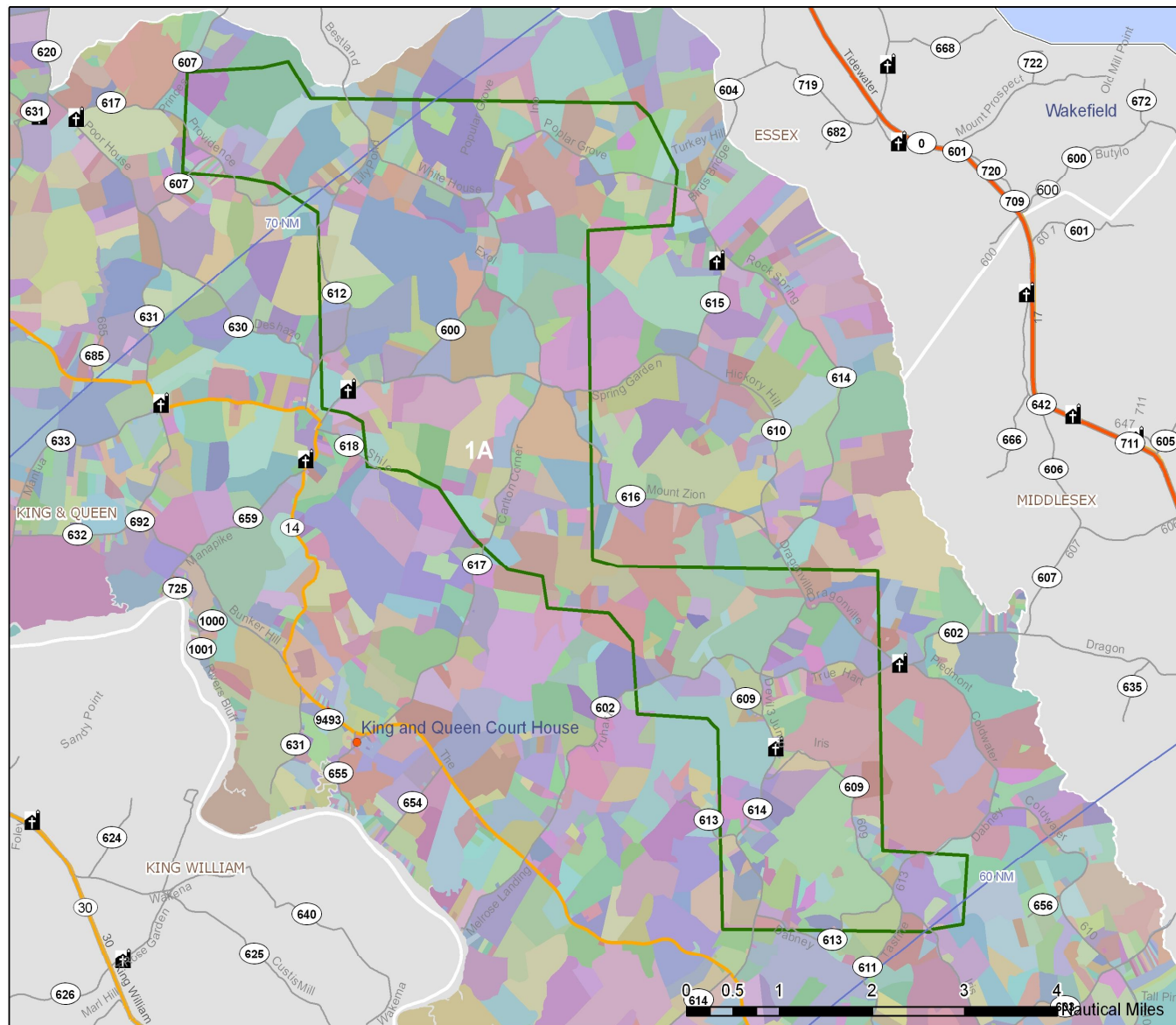


OLF Site Selection



- OLF sites
- International Paper Parcels
- Oceana Naval Air Station





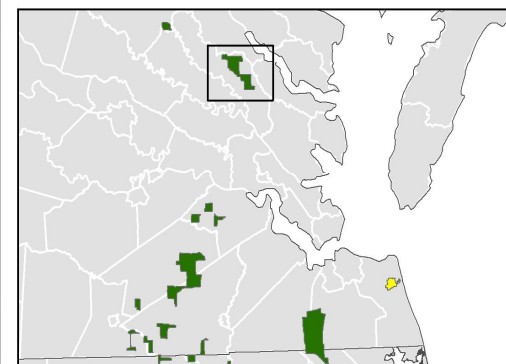
OLF Site Selection

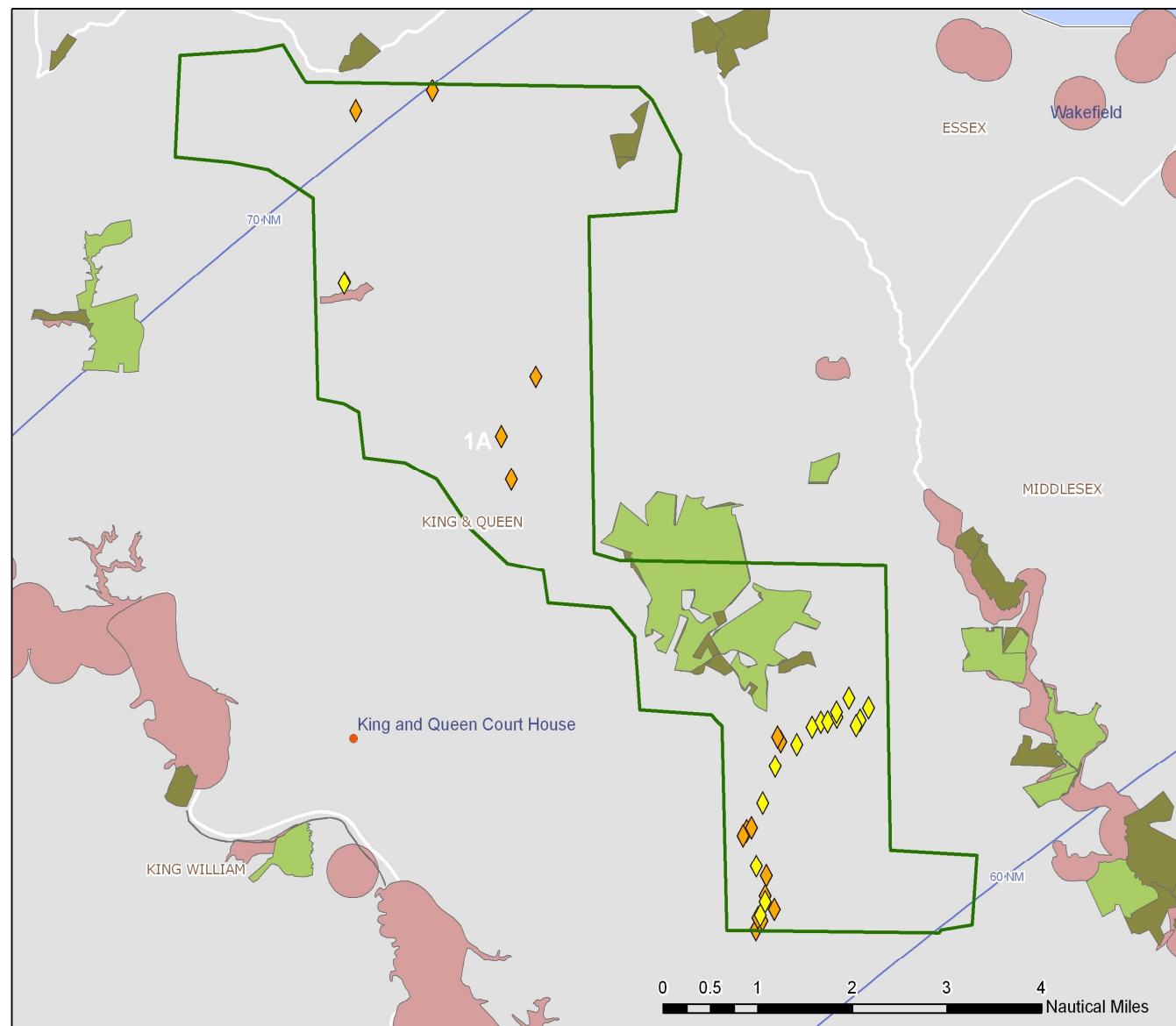


King & Queen Co.
Site 1A (20,318 acres)
with Land Parcels

Mean Parcel Acreage: 42
Max Parcel Acreage: 859

- OLF site
- airport
- church
- hospital
- park
- school



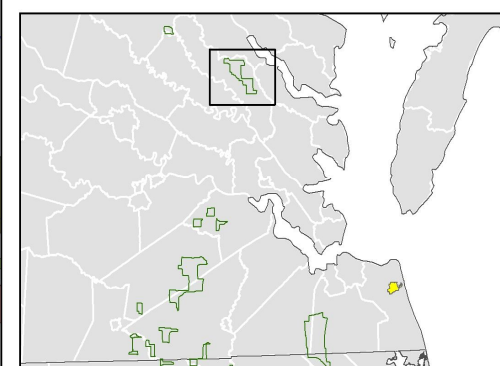


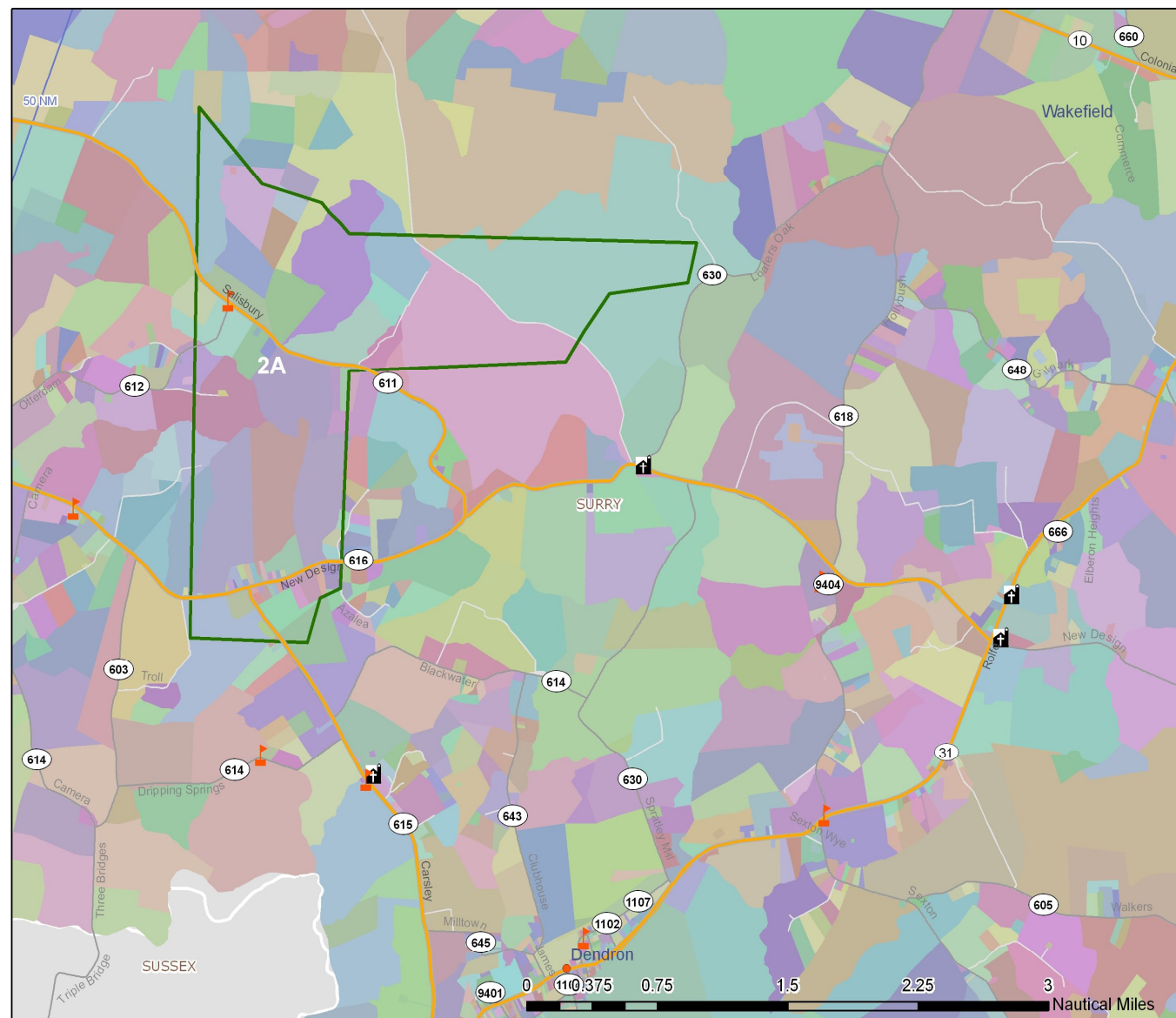
OLF Site Selection



King & Queen Co.
Site 1A
Development
Constraints

- OLF site
- ◆ Archaeological Sites
- ◆ Architectural Sites
- Easements
- Conserved Lands
- Natural Heritage Sites





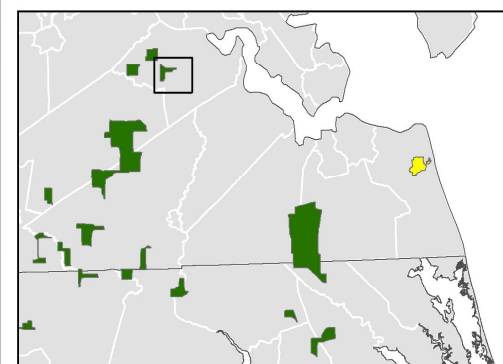
OLF Site Selection

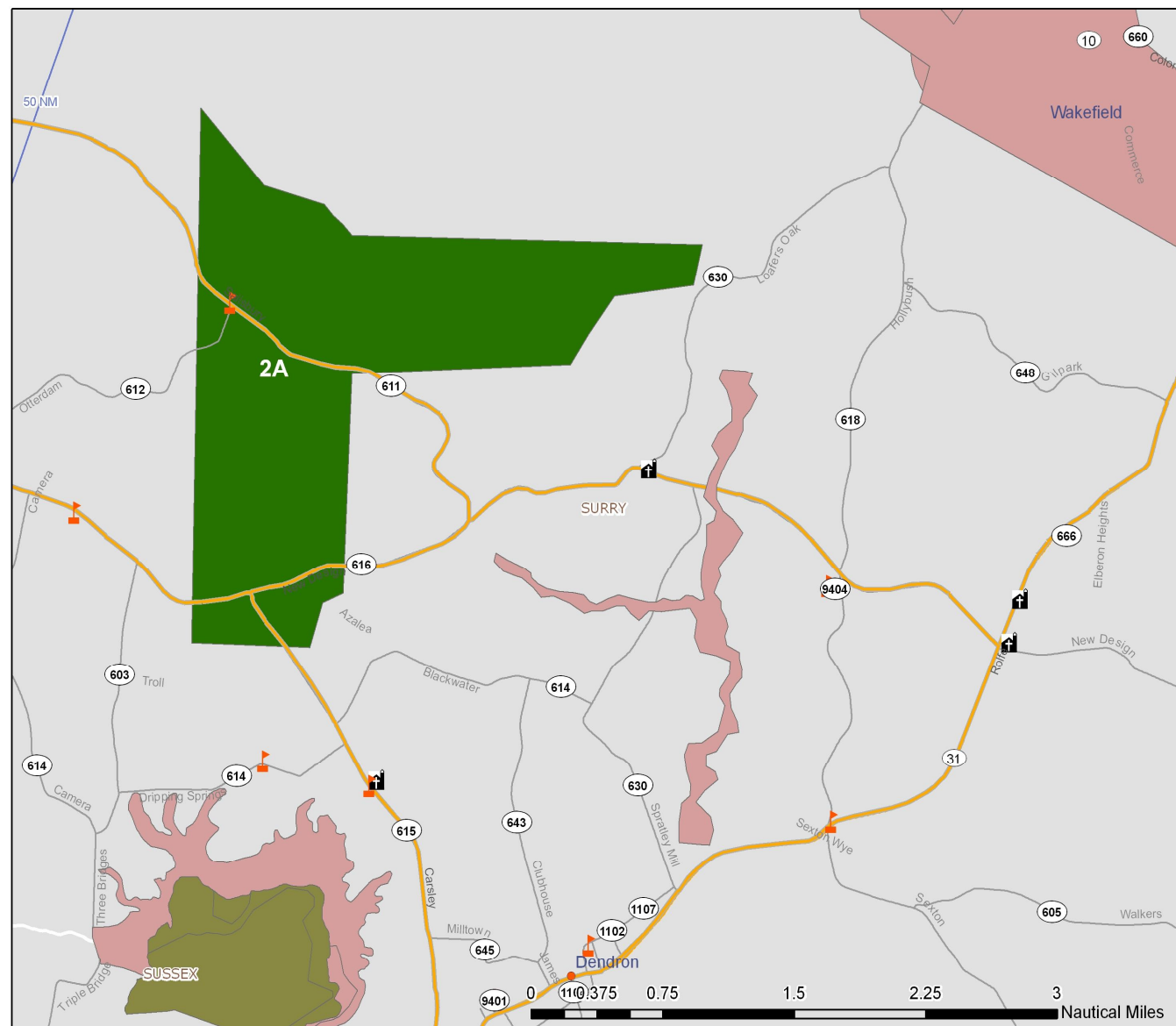


Surry Co.
Site 2A (2,797 acres)
with Land Parcels

Mean Parcel Acreage: 59
Max Parcel Acreage: 911

- OLF Site
- ✈ airport
- ⛪ church
- 🏥 hospital
- 🌲 park
- 🏫 school



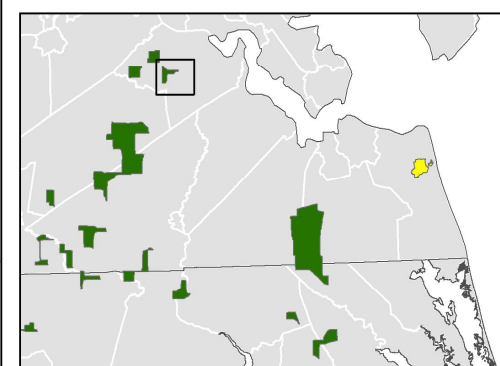


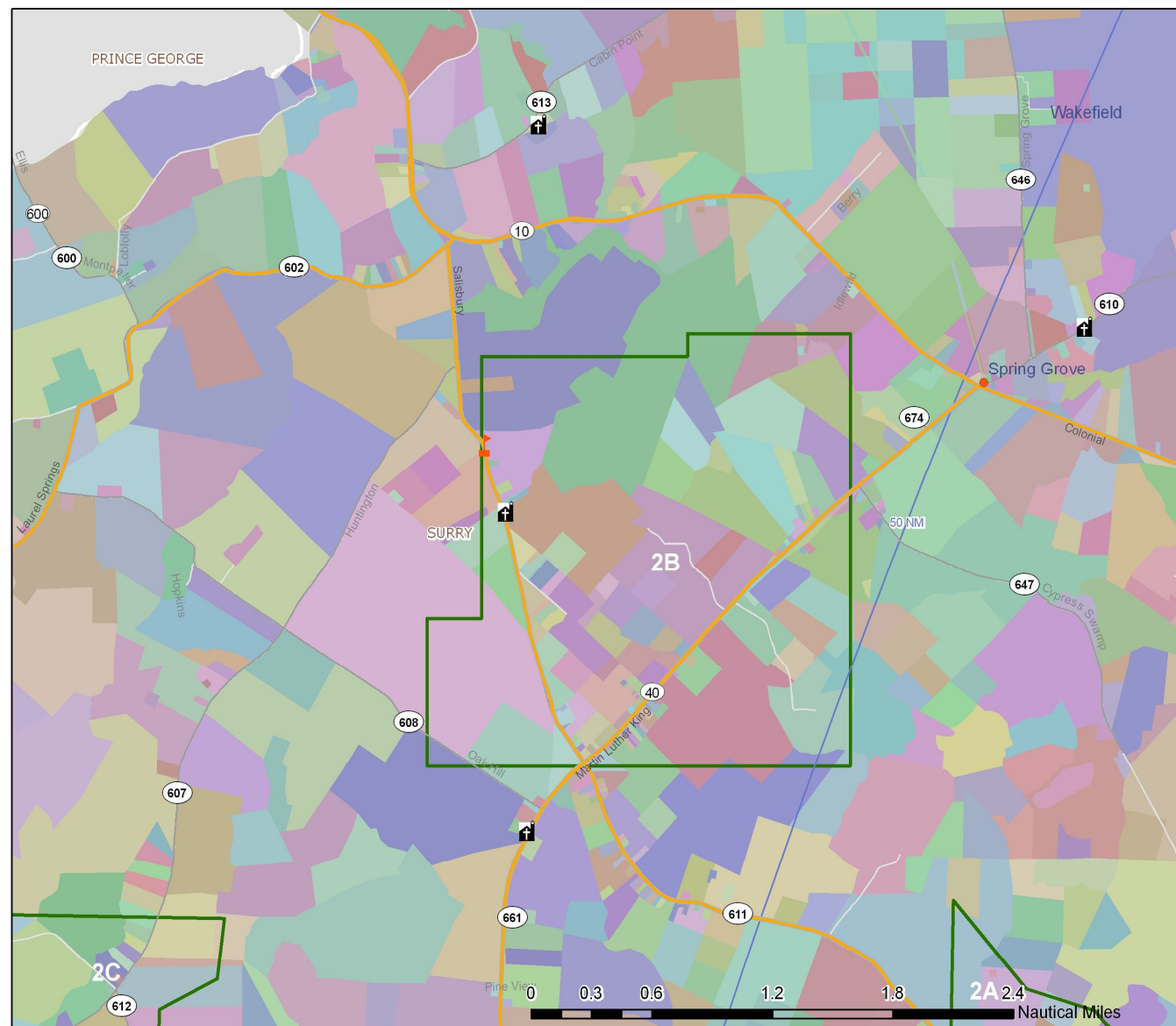
OLF Site Selection



Surry Co. Site 2A
(2,797 acres)
Development
Constraints

- OLF Site
- Archaeological_Points
- Architectural_Points
- Easements
- Conserved Lands
- Natural Heritage Sites





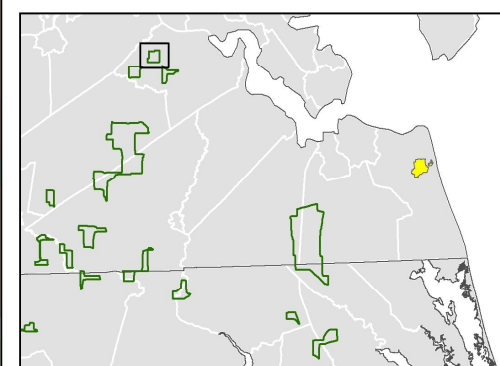
OLF Site Selection

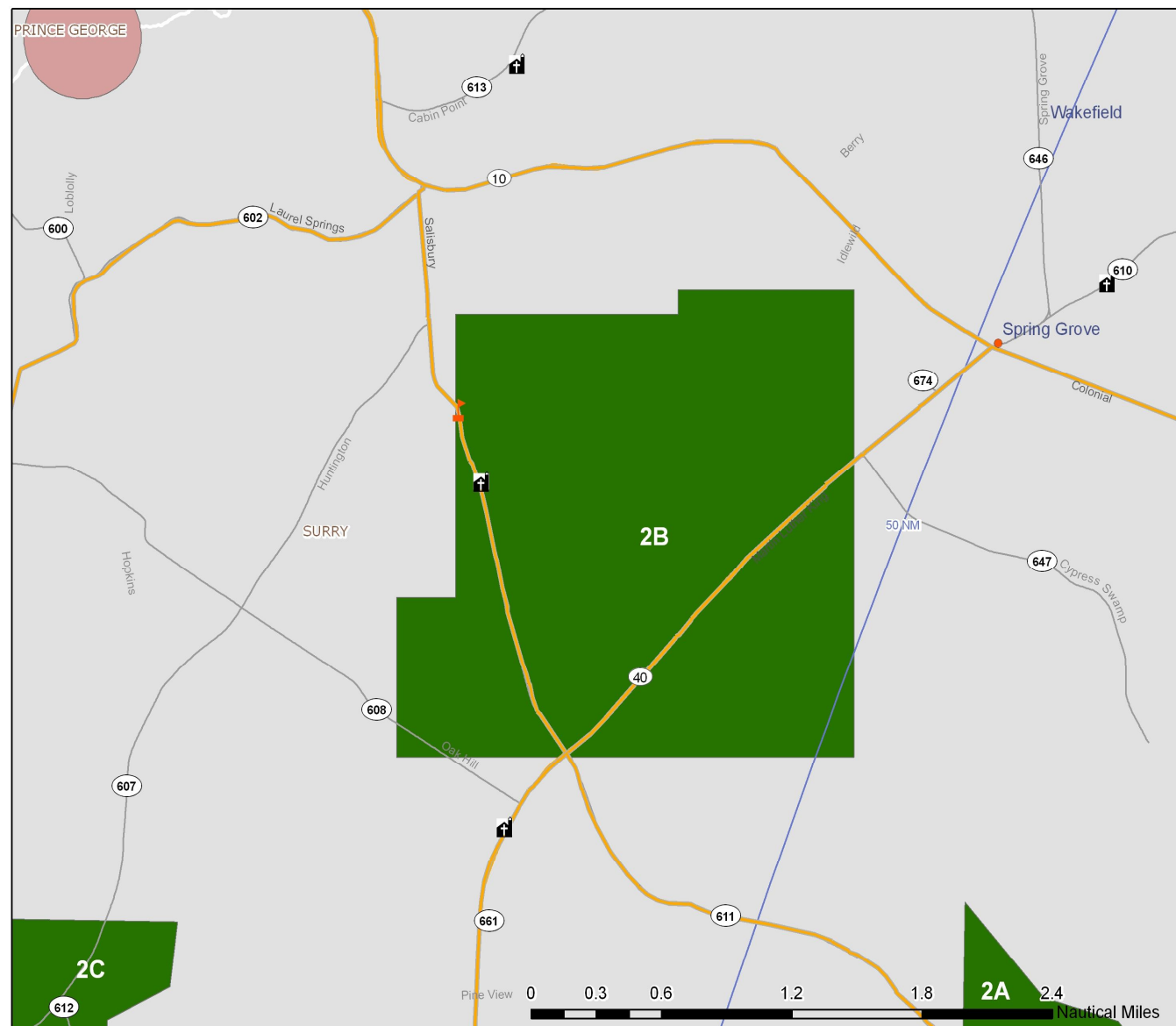


Surry Co.
Site 2B (3,259 acres)
with Land Parcels

Mean Parcel Acreage: 30
Max Parcel Acreage: 734

- OLF Site
- airport
- church
- hospital
- park
- school



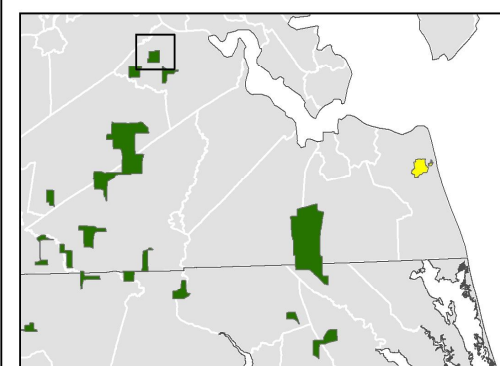


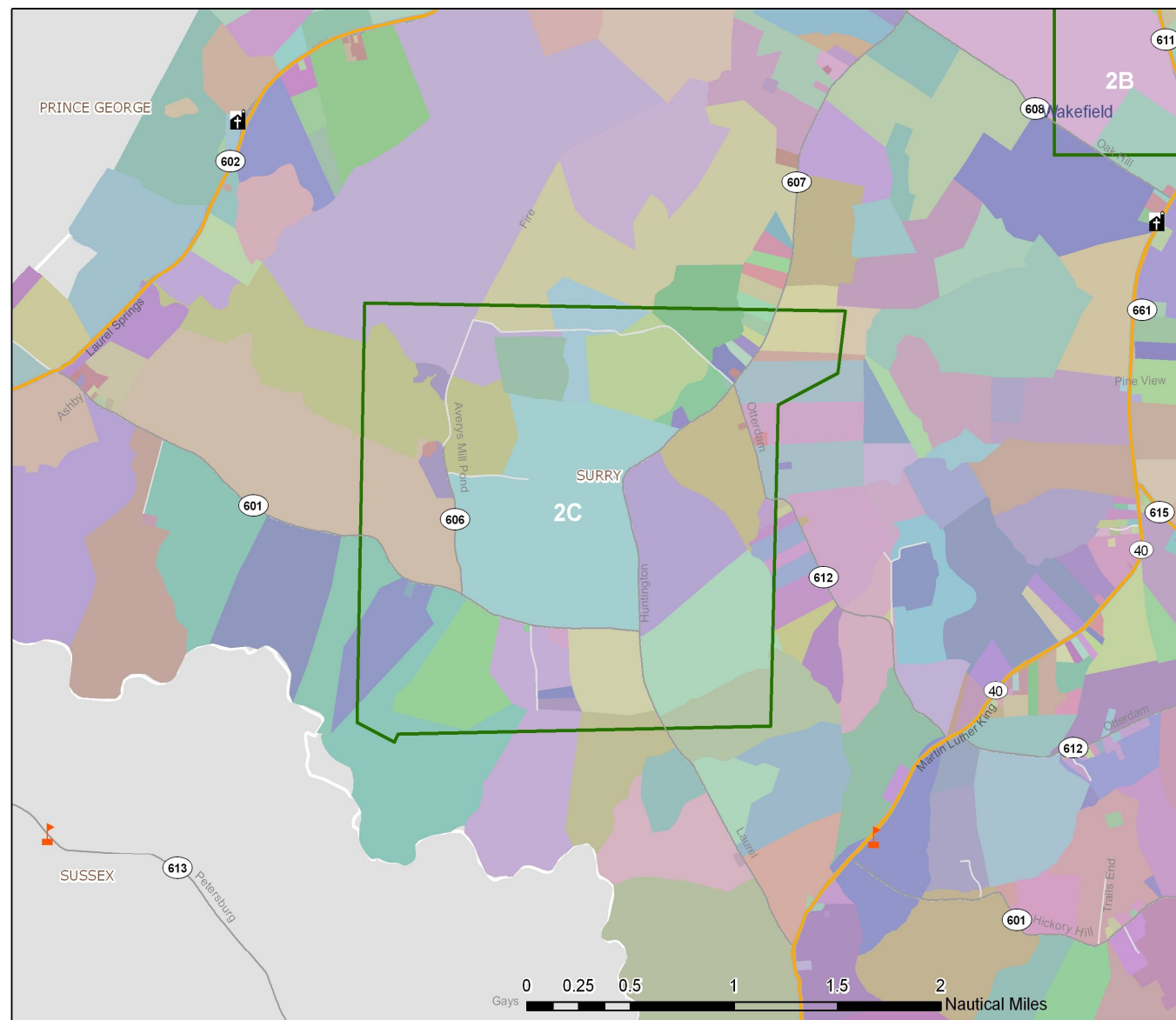
OLF Site Selection



Surry Co. Site 2B
(3,259 acres)
Development
Constraints

- OLF Site
- Archaeological Sites
- Architectural Sites
- Easements
- Conserved Lands
- Natural Heritage Sites





OLF Site Selection



Surry Co. Site 2C
(3,396 acres)
with Land Parcels

Mean Parcel Acreage: 110
Max Parcel Acreage: 1288

OLF Site

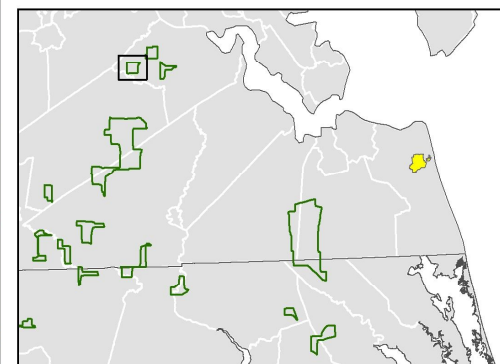
airport

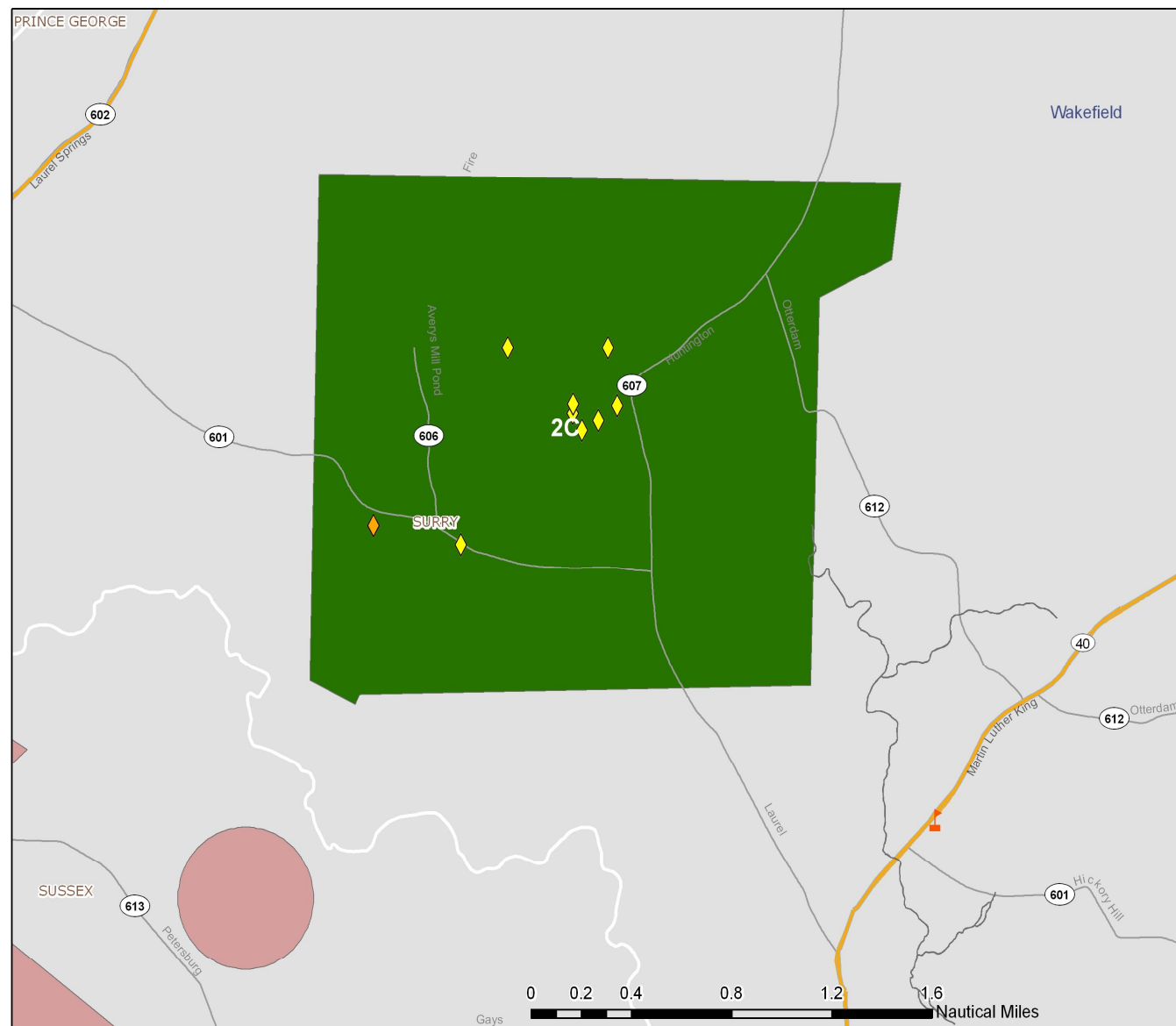
church

hospital

park

school





OLF Site Selection



Surry Co. Site 2C
(3,396 acres)
Development
Constraints

- OLF Site
- Archaeological Sites
- Architectural Sites
- Easements
- Conserved Lands
- Natural Heritage Sites

